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ABSTRACT

A survey based on a position paper provided an opportunity for a 50% random sample of members of the Health Occupations Education Division of the American Vocational Association to express their opinions on national teacher certification standards. Members were asked to indicate their degree of support using a Likert-type rating scale of eight standards required by state departments of education: (1) individual qualifications for teachers; (2) competence in general, professional, and occupational education; (3) certification for secondary and postsecondary levels; (4) cooperative agreements and certification reciprocity; (5) recency of occupational experience; (6) commitment to recruitment and retention strategies; (7) strong educational linkages and articulation agreements; and (8) national database. Guidelines for initiating national certification standards for health occupations education evolved from changes instituted in the certification process. The guidelines are: (1) meet with state certification personnel regarding requirements for initiating/changing standards; (2) develop a broad base of support; (3) conduct a survey of action to certify in other states; (4) identify pertinent studies; and (5) justify legal support for the request. (Definitions of relevant terms, an executive summary of Pennsylvania's Cogency Review, and 42 references are included.) (NLA)

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**Guidelines for Initiating Certification Standards
in Health Occupations Education**

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Background

In 1989, the Health Occupations Education (HOE) Division of the American Vocational Association (AVA) solicited a position paper from its affiliate organization, the Association of Health Occupations Teacher Educators (AHOTE), on Teacher Certification Standards. At the 1990 AVA Conference, Moore and Richards (1990) presented a position paper titled, "Development of National Health Occupations Education Teacher Certification Standards," which was accepted by the Policy Board.

Subsequent discussion at the conference centered on obtaining input on the position paper from members prior to adoption of the standards. That discussion led to the development of a questionnaire based on the position paper. The survey was sent to a random 50% of the AVA-HOE membership. Many times, division members cannot attend the national conference; therefore, using a mail questionnaire format provided an opportunity for members to express their opinions on this important activity.

Certification Standards Survey Results

There were a total of eight standards. Each standard was subdivided into supporting statements. Members were asked to indicate their degree of support for each statement using a Likert-type rating scale: 5--strongly agree, 4--agree, 3--neutral, 2--disagree, and 1--strongly disagree. All eight standards were accepted by the membership. The eight standards with their supporting statements are listed with the reaction of participants beginning on page 16.

Definitions

Professional Standards: In 1946, in an organized effort to improve the professional status of teachers and to standardize existing teaching preparation and certification programs, the National Education Association created the National Commission on Teacher Education and Professional Standards. The primary purpose of this commission was to establish and disseminate professional standards regarding selection of prospective teachers. The efforts of the professional

standards movement, on national, state, and local levels, resulted in the development of teacher certification programs in every state by 1960 (Richards, 1990).

Certification: Certification is the legal authorization for a person to teach in the public schools.

Certification regulations and policies, properly formulated and applied, contribute to the achievement of satisfactory professional standards. Certification, accreditation, and teacher education constitute a continuing process designed to assure an adequate supply of competent persons for teaching.

The primary intent of certification is to protect members of society and to promote the public welfare. Society considers certification as the only appropriate method to protect children and youth in grades K through 12 from incompetent individuals. The systemization and implementation of this objective are achieved by a regulatory entity which gives the holder of a credential the privilege to perform specific functions in the public schools of the state. To this end, the person who is

certified has the satisfaction of being identified as personally and professionally qualified for practice.

Health Occupations Education: Health occupations' education is a program area within vocational education. Health occupations education is concerned with the education of people for health care practices at levels requiring less than a baccalaureate degree; it is estimated that 80% of the people now employed in the nation's health care industry are employed at this level. The overall objective of health occupations education programs is to provide the learner with structured experiences to master theoretical and clinical skills.

State Licensure Law: Teachers of health occupations education are unique in the requirements they must adhere to in order to teach in secondary vocational education programs. Following graduation from an accredited health education program they must become licensed in the state where they plan to practice. This often requires passing a licensure examination for which the individual will receive a license or certificate bearing a registration

number. All states require that all HOE teachers hold the licensure, certification or registration required by their profession. The primary purpose of any licensure law is to protect the public from any injury caused by unqualified practitioners through enforcement of minimum standards of practice.

Standards: Organizations develop and implement standards in order to establish the minimal acceptable level of outcome. These criteria are established by authority, custom, or general consent as a model or example for the profession. Accomplishments and failures of a system or an individual within that system can be measured by criteria called standards. These criteria define the goals of desired competence.

Certification as a Standard: In order to be effective, standards need to be uniformly developed and democratically applied to the system or the individual. The development of standards for certification is vested usually in state legislature. Legislators, using input from their constituencies, have the authority to enact

laws, establish guidelines and state the regulatory practices that need to be followed before the certification process can become valid in that state. Forty-nine states exercise their authority over certification by approving collegiate programs of preparation and by reviewing the credentials of individual candidates to see that specific certification regulations are met. Mississippi reviews individual credentials of candidates but does not approve teacher preparation programs.

Guidelines

Guidelines for initiating national certification standards for health occupations education evolved from the authors' efforts to institute changes in the certification process for health occupations teachers in Pennsylvania. These guidelines are general in nature and should pertain to most states.

Guideline 1: Meet with state certification personnel regarding requirements for initiating or changing HOE certification standards.

In Pennsylvania a cogency review is required for changing certification standards. The burden of supplying reasonable evidence of the need for such action rests upon the initiator(s) of such a request, usually an organization or an educational institution.

Guideline 2: Develop a broad base of support.

The authors organized an advisory committee representing the health care industry (Pennsylvania Hospital Association); HOE teachers; the state education association (union); state department of education personnel including the HOE program specialist, the director of vocational education, and a representative from the certification bureau; PENN-HOSA president; and the executive director of the vocational education council. Initially, they served as readers and reviewers of cogency drafts. At the completion of the cogency report, they provided letters of support endorsing separate certification for HOE teachers in Pennsylvania. In addition, the following organizations and individuals were contacted for letters of support:

- * U.S. Department of Education--Catherine Junge
- * American Vocational Association - Health
Occupations Education Division - Nancy Raynor
- * AVA-HOE Affiliate - NASAHOE
- * AVA-HOE Affiliate - AHOTE
- * AVA-HOE Affiliate - NAHOT
- * State of California--Beverly Campbell
- * University of Iowa--Chester Rzonca
- * PSU, Center Director of Professional Personnel
Development in Vocational Education--
Dr. Edwin Herr
- * Chairman, Department of Vocational and Industrial
Education--Dr. Frederick G. Welch

Guideline 3: Conduct a survey of action to certify in other states.

The authors found that 40 states and territories had separate certification for health occupations education. Nine states reported that their health occupations education programs were certified under trade and industrial education. In New Mexico, health occupations education programs are certified in vocational technical education. Massachusetts certifies health occupations

education programs under occupational education and Hawaii does not offer health occupations programs at the secondary level. The following lists the type of certification for health occupations education by state, District of Columbia, and Puerto Rico as identified through the following methods:

Chappelka's Study = C

Evans' Study = E

Direct Contact = DC

1.	Alabama	Health Occupations Education	DC
2.	Alaska	Health Occupations Education	C
3.	Arizona	Health Occupations Education	DC
4.	Arkansas	Health Occupations Education	DC
5.	California	Health Occupations Education	DC
6.	Colorado	Health Occupations Education	DC
7.	Connecticut	Health Occupations Education	C
8.	Delaware	Trade and Industrial	DC
9.	District of Columbia	Health Occupations Education	DC
10.	Florida	Health Occupations Education	DC
11.	Georgia	Health Occupations Education	DC
12.	Hawaii	No health occupations programs at secondary level	C
13.	Idaho	Health Occupations Education	DC
14.	Illinois	Health Occupations Education	DC
15.	Indiana	Health Occupations Education	DC
16.	Iowa	Health Occupations Education	DC
17.	Kansas	Health Occupations Education	E
18.	Kentucky	Health Occupations Education	DC
19.	Louisiana	Vocational Trade and Industrial Certification	DC
20.	Maine	Health Occupations Education	DC

21.	Maryland	Health Occupations Education	DC
22.	Massachusetts	Occupational Education	DC
23.	Michigan	Health Occupations Education	DC
24.	Minnesota	Health Occupations Education	DC
25.	Mississippi	Health Occupations Education	E
26.	Missouri	Trade and Industrial	DC
27.	Montana	Health Occupations Education	E
28.	Nebraska	Health Occupations Education	DC
29.	Nevada	Health Occupations Education	C
30.	New Hampshire	Health Occupations Education	DC
31.	New Jersey	Health Occupations/Personnel Services	DC
32.	New Mexico	Vocational Technical Education	DC
33.	New York	Health Occupations Education	E
34.	North Carolina	Health Occupations Education	DC
35.	North Dakota	Trade and Industrial	E
36.	Ohio	Health Occupations Education	DC
37.	Oklahoma	Health Occupations Education	DC
38.	Oregon	Health Occupations Education	DC
39.	Pennsylvania	Trade and Industrial	DC
40.	Puerto Rico	Health Occupations Education	C
41.	Rhode Island	Vocational Education-Health Occupations	DC
42.	South Carolina	Trade and Industrial	DC
43.	South Dakota	Trade and Industrial	DC
44.	Tennessee	Health Occupations Education	C
45.	Texas	Health Occupations Education	DC
46.	Utah	Health Occupations Education	DC
47.	Vermont	Trade and Industrial	DC
48.	Virginia	Health Occupations Education	C
49.	Washington	Health Occupations Education	E
50.	West Virginia	Health Occupations Education	DC
51.	Wisconsin	Health Occupations Education	C
52.	Wyoming	Trade and Industrial	DC

Guideline 4: Identify pertinent studies.

A bibliography, used to develop the national certification standards and the cogency review for Pennsylvania, appears at the end of this monograph. The following studies were used specifically for the cogency review in Pennsylvania:

In 1900-2000, A Century of Progress for Health and Health Care Personnel, the authors address the population; total national health care costs; the number of health care workers; a listing of allied health occupational job titles; organizations formed; legislation enacted; certification changes; and the social issues, trends, developments, concerns and problems for each decade.

Changes in the Nature and Structure of Work:

Implications for Skill Requirements and Skill Formation

outlines some broad educational policy directions that emerged from the author's research. He suggests the need for firm-based education that integrates training and education with the workplace.

Certification of Voctional-Technical Educators

provides an interesting review of certification requirements in Pennsylvania from 1911 through 1974.

Health Occupations Education Requirements in the United States and Territories reviews data obtained from 53 states and territories on certification regulations, work experience requirements, certification requirements, and renewal requirements. Comparative tables were developed for the above, for recency of work experience, and for states with requirements leading to degree completion.

Standards of Excellence in T & I Certification, Five Years Hence points out that nationally, T & I education, is behind other disciplines in developing quality certification.

The Current Status of T & I Teacher Education in the United States notes that advisory committee and sex equity are the areas which require the greatest need of improvement.

The Role of the University in Trade and Industrial Education Credentialing states that the vast majority of T & I teachers are non-degreed. One hundred and seven degree titles are listed making reciprocity of credentialing confusing. The author suggests a study of practices among universities is long overdue.

In A National Survey of Health Occupations Education Certification in the United States, the author explored the current policies and practices of certification at the secondary and postsecondary levels, trends and issues in certification that will affect HOE and the strengths and weaknesses of HOE certification as perceived by program specialists and teacher certification officers in each state.

A Context for Change: Vocational-Technical Education and the Future suggests that steps must be taken to change the public perception of vocational education's role in secondary and postsecondary schools.

Responses to the Allied Health Services: Avoiding Crises report were provided by representatives of

four-year colleges, two-year colleges, and the health care industry. An overview of the report encouraged educational institutions to become creative in their approaches to the recruitment of students and to forge alliances with business, private foundations, and professional organizations.

Workforce 2000: Work and Workers for the 21st Century addressed developments in technology, international competition, demography, and other trends that will alter our nation in the future.

Junge looked at future trends for institutions offering health care provider programs, the student population of these programs, the curriculum or course content, and the assurance of quality in health care programs when she authored Future Directions of Health Care and Health Care Education.

Vocational Teacher Education: A Context for the Future suggests eight general themes undergirding most of the proposals for change in the preparation of beginning teachers. The report includes the perceived efforts of

nationally posited and state mandated reforms on vocational teacher education and charts some future directions for vocational teacher education within the overall context of reform.

McQuay looked at Patterns of Credentialing/Certification of Secondary Health Occupations Teachers in her 1977 unpublished master's thesis. Her recommendations would still be valid in 1991, as very few changes have occurred in these patterns.

In the study, Vocational Professional Personnel Preparation in Pennsylvania: A Future Perspective, participants attempted to determine the impact of educational change upon vocational professional personnel preparation in the Commonwealth.

Health Occupations Education: Avoiding Crises describes the current role of health occupations education in meeting the need for health care professionals in Pennsylvania.

Health Occupations Education Profile: The Heartbeat of Pennsylvania provides a description of secondary HOE students for the last five years in Pennsylvania.

Educational Needs Assessment of Health Occupations Education Teachers was a project to assess the educational needs and interests of HOE teachers in Pennsylvania. The information was used to develop a program delivery plan for teachers employed in HOE.

Guideline 5: Justify legal support for the request.

Although nursing was defined as a trade and included under the trade and industrial areas of vocational education after the Smith Hughes Act of 1917, later legislation established health occupations as a new subsystem within vocational education and encouraged states to develop programs for training in the health occupations. Since 1956, health occupations education has been recognized as an established program area of vocational education.

The Public School Code of 1949, Article XVII Vocational Education, Section 1841 (24 PS 18-1841) Area

vocational-technical schools and technical institutes authorized the following:

An area vocational-technical board may establish, maintain, conduct and operate schools, departments or classes to prepare for vocational industrial, vocational agricultural, vocational homemaking, business and vocational distributive occupations, technical occupations, such as aides and assistants, in physical, biological, space and other sciences, mathematics, engineering, construction and design, computer programming and maintenance, and health occupations and for any other occupations requiring vocational or technical training and education to be known as "area vocational-technical schools," for the education of pupils, out-of-school youth and adults residing in the attendance area. This section lists health occupations as an area separate from the vocational industrial area, and includes it as a program area for instruction in area vocational-technical schools.

Health Occupations Education is a division of the American Vocational Association represented by its own officers. It has its own vocational student organization, Health Occupations Students of America (HOSA), which is a 100% health care student organization.

Executive Summary of Pennsylvania's Cogency Review

NOTE: Standards 1 through 7 were addressed in the cogency review with one exception. Standard 3 encourages state department of education to require certification at both secondary and postsecondary levels. In Pennsylvania, the Board does not have the authority to require postsecondary certification. Standard 8 was not addressed in this document which calls for the establishment of a national data base for vocational teacher education, including health occupations education. The authors believe that their present research can become a part of that data base.

The basic element of a successful health occupations education program is a qualified teacher who is academically, occupationally, as well as pedagogically competent in teaching methods and skills which are an integral part of the instructional process. In order to become a qualified teacher in Pennsylvania, those who are occupationally competent, without prior teacher education, must work toward permanent certification which

includes 33 credits in vocational-industrial education and 27 credits in general education. The trade and industrial curriculum does not address the legal and/or ethical issues encountered in health care. It does not include coursework in geriatrics, information on human immunodeficiency viruses (HIV), or infection control practices needed to guard against AIDS. Individuals knowledgeable about health occupations teacher education should be advising health occupations teachers to meet their certification needs and requirements.

Health care in the United States is influenced by economic, demographic and societal changes. Nationally, health care is the leading growth field for jobs in the 1990's. The Pennsylvania Department of Labor and Industry projects an increased demand for health services occupations of approximately 30% by the year 1995. Pennsylvania is one of seven states with more than one million people aged 65 and over, and 25% of the population is projected to be over age 60 by the year 2030. Rising income levels, increased demand for leisure

activities, and an aging population with a greater need for health care services will be important factors contributing to the growing service sector. Societal changes include: the increased incidence of infectious diseases; medical indigency and the possibility of national health insurance; the aging baby boomers (1/3 of the population) and their demand for the development of convenient, personalized, basic care; and the long term care needs of an aging population. State budget cuts in Pennsylvania have led to the closure of a number of state hospitals, which will impact on the economy and population of certain areas of the state.

The Pennsylvania Department of Education's commitment to the elimination of discrimination and gender bias should be reflected in the sex equity practices within vocational education certification. As a minority population (95% female), health occupations education teachers have been denied the opportunity to advance to administrative and leadership positions within vocational education.

Pennsylvania must consider the political reality of certification. In February 1990, 25 million dollars in matching funds were legislated by the Senate to the National Board for Professional Teaching Standards by a 98-2 vote. Since the nation appears to be moving toward national standards for teachers, and testing for excellence requires a bachelor's degree, the Commonwealth should make the baccalaureate degree mandatory for permanent certification.

Pennsylvania has been recognized as a leader in the education of health care professionals but must catch-up with the certification action in other states. The state needs to continue to provide quality educational programs and to support standards of excellence in education.

During 1988-89 one-half (50%) of the students enrolled in health occupations education programs in Pennsylvania were handicapped and/or disadvantaged. Numerous studies substantiate the need for health care professionals now and in the future. The question is, "Are we helping to avoid a crisis by supplying qualified

graduates or are we creating a crisis by graduating unqualified persons?" The implied outcomes of American public education are employment and self sufficiency. Are we providing this for special needs students, or are they leaving the shelter of a school program to go home to sit, burdening parents and taxpayers?

The Pennsylvania Department of Education should impact upon the educational development of health occupations education students in the Commonwealth by requiring that teachers, certified in health occupations education, participate in continuing education activities for recertification in order to stay abreast of the rapid technological changes occurring in the health care field. The concept of maintaining lifelong competency based on initial educational experience is no longer accepted by consumers or professionals.

As early as 1936, the Industrial Education subcommittee of the Association of Liberal Arts Colleges of Pennsylvania for the Advancement of Teaching advocated

a requirement that all vocational industrial teachers, including health occupations education teachers, be college graduates in addition to possessing adequate trade experience. This recommendation appears repeatedly in the search of literature and can be found in: Brantner (1974), McKay (1977), USDE (1985), Standards of Excellence in Trade and Industrial Education (1989), Chappelka (1989), Quest for Excellence (1989), Duenk (1989), Evans (1990), and in numerous other studies cited throughout this report. The baccalaureate degree should be the minimum standard for permanent certification for all health occupations education teachers in the Commonwealth, thus enabling reciprocity with other states.

Traditionally health care programs have attracted students that are characteristically young, white, and able to pay; a profile which does not match that of minority, low income and academically disadvantaged students. Demographic studies show that the United States population of 18 to 23 year olds has been

declining since the beginning of this decade and will continue to decline through the mid-1990's. In addition, other attractive opportunities compete for this population's attention. This suggests that less traditional sources of students will need to be recruited for allied health, including minorities, older persons, and career changers. Institutional programs that actively recruit minority populations into the health care field should receive PDE support.

Available data indicate that in many allied health occupations entry-level pay is currently competitive with other comparable occupations, but allied health salaries over the life of a career are so compressed that there is no incentive to remain in the occupation. Retention efforts need to be made by the health care industry, while education works on articulation efforts to maximize career mobility to the fullest extent.

Finally, the requirement of a Health Occupations Education Certificate by the Pennsylvania Department of Education would assure that allied health programs are

staffed by motivated and trained teachers who are knowledgeable of the need to establish strong industry-education linkages and articulation agreements between all levels of education institutions. In Pennsylvania, the Hospital Association of Pennsylvania has established such a linkage with the student organization in health called the HAP-HOSA Venture.

The authors found that health occupations education is the only area in vocational education that does not have separate certification in the Commonwealth. A review of action to certify in other states shows that forty states and territories, including the District of Columbia, provide separate certification for health occupations education. Pennsylvania is one of only nine states that continue to certify HOE teachers under Trade and Industrial Education.

National Certification Standards

A questionnaire, consisting of the certification standards and supporting statements, was sent to 50% of the AVA-HOE membership. From the 864 membership sample,

questionnaires were returned by 264 (31%) participants. The standards, supporting statements and membership responses are reported in this section.

Standard 1. State departments of education require that individuals who are employed as health occupations education teachers are qualified for those roles.

- 1.1 Professional preparation through licensure/certification/registration.
- 1.2 Baccalaureate degree required for permanent certification.
- 1.3 Baccalaureate degrees elevate the quest for excellence in education.
- 1.4 States should offer baccalaureate degrees in health occupations.

Standard 1 had an overall agreement response of 72%.

Statement 1.1 had the highest level of agreement (95%).

Standard 2. State departments of education require that health occupations teacher education programs need to include competence in general education, professional education, and occupational education.

- 2.1 Advocate on-the-job experience as health practitioners prior to teaching.
- 2.2 Support teacher education preparation including student teaching in order to help practitioners become teachers.
- 2.3 Require professional education in working with special needs students (handicapped/disadvantaged/at risk).
- 2.4 Advocate knowledge of program management and the creation of programs as well as classroom teaching skills.

Standard 2 had an overall agreement response of 80%.

Statement 2.1 had the highest level of agreement (96%).

Standard 3. State departments of education require certification at both the secondary and postsecondary levels for the health occupations education vocational area.

- 3.1 Advocate certification for instructors of (a) secondary HOE programs, (b) postsecondary HOE programs, and (c) adult level vocational programs.
- 3.2 Advocate certification for HOE teachers separate from trade & industry and/or other vocational areas.
- 3.3 Credentialing guidelines in HOE should be clearly defined and consistently applied by individuals knowledgeable in HOE teacher education.

Standard 3 had an overall agreement response of 86%.

Statement 3.3 had the highest level of agreement (95%).

In addition, this statement did not have any disagreement responses.

Standard 4. State departments of education require the establishment of cooperative agreements to encourage reciprocity in health occupations education certification.

- 4.1 Advocate cooperative certification agreements among state departments of education to encourage reciprocity in HOE certification.
- 4.2 Advocate certification by endorsement be handled similar to licensure by endorsement when one relocates to another state.
- 4.3 Advocate national standards that would certify HOE teachers and encourage reciprocity.

Standard 4 had an overall agreement response of 85%.

More responses were found in the neutral category than in the disagreement categories for all three supporting statements.

Standard 5. State departments of education require recency of occupational experience.

- 5.1 A continual upgrading of skills should be part of HOE certification requirements.
- 5.2 Advocate continuing education beyond the previously established level of competence.
- 5.3 Support mandatory continuing education in (a) health occupations area, and (b) education.
- 5.4 Advocate recency of occupational experience within (a) 0 - 2 years, (b) 3 - 5 years, and (c) more than 5 years.

Standard 5, with its four supporting statements and advocating recency of occupational experience within 0 to 5 years, had an overall agreement response of 80%.

Standard 6. State departments of education require a commitment to recruitment and retention strategies.

- 6.1 Advocate recruitment of qualified health care practitioners as teachers.
- 6.2 A key recruitment challenge is increasing the number of minority teachers.
- 6.3 Advocate retention incentives for experienced teachers.

Standard 6 showed an agreement response of 88% for two of its three supporting statements, 6.1 and 6.3.

Approximately equal numbers of participants agreed (101) or responded neutral (107) to statement 6.2.

Standard 7. State departments of education require the establishment of strong education linkages to reflect the rapid technological changes taking place in the industrial environment, and articulation agreements between all levels of educational institutions.

- 7.1 Advocate articulation agreements that recognize previous education and experience among the different educational levels.
- 7.2 Collaborative working relationships between business and industry and educational facilities should prove to be mutually beneficial.
- 7.3 Involvement of employers, employees, students, consumers, and citizens on HOE advisory committees assures program relevance, increases public awareness, creates partnerships, and builds and maintains strong effective instructional programs.

Standard 7 had an overall agreement response of 92%.

Standard 8. State departments of education require the establishment of a national data-base for vocational teacher education, including health occupations teacher education.

- 8.1 Vocational teacher education programs need research specifying the knowledge base underlying teacher preparation.
- 8.2 The teacher education reform movement will have a positive effect on vocational education.
- 8.3 State education departments see a need for research to be conducted on HOE.

Standard 8 had an overall response agreement of 70%.

The national teacher certification survey was sent to one-half (864) of the membership. In the letter, it was noted that there would be only one mailing due to budget limitations. Stamped return envelopes were not included in the mailing for the same reason. Two hundred and sixty-four (31%) questionnaires were returned. The high return of questionnaires reflects the willingness of members to participate in this important

activity and suggests a strong professional commitment to the organization.

Bibliography

- Anderson, P., Ostler, R. & Petersen, D. (1990). 1900-2000 a century of progress for health and health care personnel. Sacramento, CA: American Vocational Association, Health Occupations Education Division.
- Bailey, T. (1990). Changes in the nature and structure of work: Implications for skill requirements and skill formation. Berkeley, CA: National Center for Research in Vocational Education.
- Brandt, J. A. (1988). Current use and future need for multiskilled health workers in Iowa small hospitals. Unpublished doctoral thesis, Iowa City, IA: The University of Iowa.
- Brantner, S. T. (1974). Vocational teacher certification in Pennsylvania. In S. T. Brantner (Ed.), Certification of Vocational Technical Educators (pp. 22-27). University Park, PA: The Pennsylvania State University.
- Brown, J. H. (1978). The health care dilemma. New York, NY: Human Sciences Press.
- Chappelka, C. (1989). Health occupations education requirements in the United States and territories. Blacksburg, VA: Virginia Polytechnic Institute and State University, Division of Vocational and Technical Education.

- Cooper, S. S. (1973). A brief history of continuing education in nursing in the United States. Journal of Continuing Education in Nursing, 4 (3), 5-14.
- Davison, L. M. (November/December 1989). The changing curriculum. Vocational Education Journal, 64 (8), 47-48.
- Duenk, L. G. (1990). Standards of excellence in T & I certification five years hence. Blacksburg, VA: Virginia Polytechnic Institute and State University, Division of Vocational and Technical Education.
- Duenk, L. G. (1990). The current status of T & I teacher education in the United States. Blacksburg, VA: Virginia Polytechnic Institute and State University, Division of Vocational and Technical Education.
- Duenk, L. G. (1990). The role of the university in trade and industrial credentialing. Blacksburg, VA: Virginia Polytechnic Institute and State University, Division of Vocational and Technical Education.
- Evans, J. M. (1990). A national survey of health occupations education certification in the United States. Unpublished doctoral thesis, University Park, PA: The Pennsylvania State University.
- Feistritzer, C. E. (1983). The condition of teaching. Princeton, NJ: The Carnegie Foundation for the Advancement of Teaching.
- Ford, A. (1974). History of vocational teacher certification in the United States. In S. T. Brantner (Ed.), Certification of Vocational Technical Educators (pp. 1-7). University Park, PA: The Pennsylvania State University.

- Frantz, N. R. Jr. & Miller, M. D. (1990). A context for change: Vocational-technical education and the future. Macomb, IL: Curriculum Publications Clearinghouse, Western Illinois University.
- Gillies, D. A. (1982). Nursing management: A systems approach. Philadelphia, PA: W. B. Saunders Company.
- Glenn, J. W. Jr. & Walter, R. A. (1990). Vocational teacher preparation. In A. J. Pautler, Jr. (Ed.), Vocational Education in the 1990s: Major Issues. Ann Arbor, MI: Prakken Publications, Inc.
- Goodlad, J. I. (1990). Better teachers for our nation's schools. Phi Delta Kappan, 72 (3), 185-194.
- Holmes Group, Inc. (1986). Tomorrow's teachers. East Lansing, MI: Michigan State University.
- Institute of Medicine. (1989). Allied health services: Avoiding crisis. Springfield, VA: The National Training Information Service, U.S. Department of Commerce.
- Johnston, W. B. & Packer, A. B. (1987). Allied health services: Avoiding crisis. Springfield, VA: The National Training Information Service, U.S. Department of Commerce.
- Junge, C. B. (1986). Future directions of health care and health care education. In B. Richards (Ed.), The first national health occupations education curriculum conference. Iowa City, IA: The University of Iowa Program in Health Occupations Education.
- Kinney, L. B. (1964). Certification in education. Englewood Cliffs, NJ: Prentice-Hall, Inc.

- Kurzen, C. R. (1989). Contemporary practical/vocational nursing. Philadelphia, PA: J. B. Lippincott Company.
- Lynch, R. L. & Griggs, M. B. (1989). Vocational teacher education: A context for the future. Berkeley, CA: National Center for Research in Vocational Education.
- Makely, S. (1988). Multicompetency education at Methodist Hospital of Indiana, including research, add-a-comp program implementation, and results-to-date. In Second Annual Health Occupations Education National Research Conference Proceedings. Indianapolis, IN: Indiana University-Purdue University at Indianapolis.
- Mastain, R. K. & Roth, R. A. (1984). Manual in certification and preparation of educational personnel in the United States. Sacramento, CA: National Association of State Directors of Teacher Education and Certification.
- McQuay, S. A. (1977). Patterns of credentialing/certification of secondary health occupations teachers. Unpublished master's thesis, University Park, PA: The Pennsylvania State University.
- Pennsylvania Department of Education. (1987). Vocational professional personnel preparation in Pennsylvania: A future perspective. Harrisburg, PA: Author.
- Raynor, N. L. (May 1989). Health occupations education: New jobs, changed jobs. Vocational Education Journal, 64 (4), 34-35.

Richards, Beverly. (Spring 1990). Health Occupations Education Profile: The Heartbeat of Pennsylvania. Journal of Health Occupations Education, 5, (1) 31-44.

Richards, Beverly. (Fall 1990). Health Occupations Education: Avoiding Crisis or Creating Crisis. Journal of Health Occupations Education, 5, (2) 1-16.

Richards, B. (May 1990). Teaching certification requirements for nursing assisting programs. A Position Paper Supporting States' Rights to Develop and Maintain Nursing Assistant Teacher Certification. Arlington, VA: American Vocational Association.

Richards, M. B. (1980). Development of a health occupations teacher education curriculum with validation of teaching functions. Unpublished doctoral thesis, University Park, PA: The Pennsylvania State University.

Richards, B., Evans, J., & Herr, E. (1988). Educational needs assessment of health occupations education teachers. University Park, PA: The Pennsylvania State University, Department of Vocational Education.

Stein, L. S. (1971). Adult learning principles: The individual curriculum and nursing leadership. Journal of Continuing Education in Nursing, 2 (6), 7-13.

Thurston, H. I. (1990). Mandatory continuing education: What does the research show? Paper presented at the Issues in Medical Continuing Education for the 1990's. Kansas City, MO.

- Tobias, S. & Zibrin, M. (1982). Looking towards the future in the health occupations. New York, NY: Institute for Research and Development in Occupational Education.
- U.S. Department of Labor. (Spring 1990). Occupational Outlook Quarterly, Washington, DC: Author.
- U.S. Department of Labor. (Summer 1990). Occupational Outlook Quarterly, Washington, DC: Author.
- Watkins, B. T. (July 26, 1989). National teaching--standards board takes initial steps toward certification, sets qualification guidelines. The Chronicle of Higher Education, pp. A15, A18.
- Wise, A. E. (November 1990). Policies for reforming teacher education. Phi Delta Kappan, 72 (3), 200-202.